

Report of a PRA

Pest: Potato virus S – Andean strain (PVS^A)
PRA area: EPPO region
Assessor: Plant Protection Service, the Netherlands
Date: February 2000

Initiation

Reason for doing PRA

Request EPPO on behalf of the preparation of a potato commodity standard.

Taxonomic position of pest

Viridae: genus *Carlavirus*.

Probability of introduction

Entry

Geographical distribution

Andean region of South America (Bolivia, Chile, Colombia, Ecuador, Peru). Reports from Europe (Germany (breeders line, field survey) , the Netherlands (breeders line)), New Zealand, North America (Minnesota, Nebraska, North Dakota, Wisconsin).

Major host plants

Potato (*Solanum tuberosum*).

Which pathway(s) is the pest likely to be introduced on:

Seed potatoes. Imports of germplasm undergo post-entry quarantine testing. Ware potatoes are not likely to introduce PVS^A.

Establishment

Crops at risk in the PRA area:

Potato.

Climatic similarity of present distribution with PRA area (or parts thereof):

Similar.

Aspects of the pest's biology that would favour establishment:

Transmitted rather easily by contact and additionally by aphids in a non-persistent manner. Compared with PVS^O transmission might be more efficient.

Characteristics (other than climatic) of the PRA area that would favour establishment:

'International' trade in seed potatoes.

Which part of the PRA area is the endangered area:

Potato growing areas in the whole EPPO region.

Economic impact assessment

Describe damage to potential hosts in PRA area:

Yield of potato tubers is expected to decrease by up to 20%. In combination with other potato viruses, especially potato virus X, yield losses might be higher.

How much economic impact does the pest have in its present distribution:

No data available.

How much economic impact would the pest have in the PRA area:

Difficult to access. PVS^o already occurs in the EPPO region. PVS^A has been found in the past, but its present distribution is unknown. Measures taken to control PVS^o might be sufficient to control PVS^A as well.

Conclusions of PRA

Summarise the major factors that make the risk from this pest unacceptable:

It is questionable if the differences between PVS^A and PVS^o justify a quarantine status of PVS^A. PVS^A is known to spread more easily than PVS^o and symptoms might be more severe. However, PVS^A has been found outside the Andean region, including the EPPO region. Therefore, more information on the present distribution is needed to decide on the status of PVS^A.

Give an estimate of the probability of establishment:

The probability of establishment will depend on the present distribution of PVS^A.

Give an estimate of potential economic impact:

The economic impact will depend on the status of PVS^A. If a quarantine status is not applicable the economic impact is expected to be comparable to PVS^o.